

ABSTRACT

A holographic recording apparatus 10 realizes multilevel gray-scale recording by: controlling a reflection type spatial light modulator (DMD 18D) via a control unit 24 so that an object beam in an object optical system 18 is reflected in an exposure direction so as to be incident on a holographic recording medium 16 or in a non-exposure direction so as not to be incident thereon selectively pixel by pixel in accordance with a data page to be recorded; and making (N + 1) levels of gradation exposure with a single exposure time t_1 given by dividing t_0 by N, where t_0 is an exposure time necessary for rendering a single pixel of the data page as an ON pixel, and N is an integer of not less than 2.